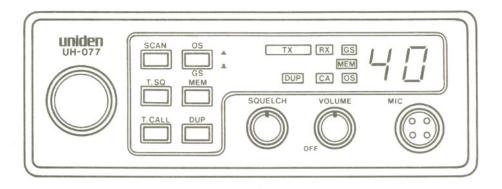
uniden®

UHF CB TRANSCEIVER

OWNER'S MANUAL

SUNDOWNER UH-077
SCANNING



DESCRIPTION

Your UNIDEN Model SUNDOWNER UH-077 represents the most advanced Mobile Station type radio ever designed for use in the Citizens Band Radio Service. It will operate on any of the 40 frequencies designated as citizens band channels by the Department of Communications. Your Model SUNDOWNER UH-077 features a frequency synthesizing circuit with PHASE LOCK LOOP techniques to assure ultraprecise Frequency control. This radio has been Type Accepted and Type Certified by the D.O.C.

WARNING -

Before transmitting with your transceiver, you must obtain a Department of Communications (D.O.C.) Citizens Radio Licence. Obtain an application form from the D.O.C. Before completing the form you should read the conditions governing the licensing and operation of the C.R.S. (D.O.C. brochure RB 250). This brochure also can be obtained from the D.O.C. After completing the application form, mail it with the appropriate fee to the Superintendant Regulatory of Licensing in the State or territory in which the station will be operated.

CHANNEL INFORMATION

This radio has been designed to provide high level performance in the Citizens Band Radio Service, which is comprised of the following frequency assignments:

Channel	Channel Frequency in MHz	Channel	Channel Frequency in MHz	Channel	Channel Frequency in MHz
1	476.425	15	476.775	29	477.125
2	476.450	16	476.800	30	477.150
3	476.475	17	476.825	31	477,175
4	476.500	18	476.850	32	477.200
5	476.525	19	476.875	33	477.225
6	476.550	20	476.900	34	477.250
7	476.575	21	476.925	35	477.275
8	476.600	22	476.950	36	477.300
9	476.625	23	476.975	37	477.325
10	476.650	24	477.000	38	477.350
11	476.675	25	477.025	39	477.375
12	476.700	26	477.050	40	477,400
13	476.725	27	477.075		
14	476.750	28	477.100		

DUPLEX OPERATING FREQUENCIES

CHANNEL	RX	TX		
		477.175 MHz (CH31)		
	476.450 " 476.475 "	477.200 " (CH32) 477.225 " (CH33)		
	476.500 "	477.250 " (CH34)		

CHANNEL	RX		TX		
CH5	476.525	MHz	477.275	MHz	(CH35)
CH6	476.550		477.300		(CH36)
CH7	476.575	93	477.325	11	(CH37)
CH8	476.600	99	477.350	11	(CH38)

INSTALLATION

MOBIL E STATION INSTALLATION

Plan the location of the transceiver and microphone bracket before starting the installation. Select a location that is convenient for operation and does not interfere with the driver or passenger in the vehicle. The radio should be securely fastened to some solid face, using the mounting bracket and self-tapping screws which are provided.

MOBILE STATION ANTENNA

Since the maximum allowable power output of the transmitter is limited by the D.O.C., the antenna is a very important factor affecting transmission distance. It is for this reason that we strongly recommend that you install only a quality antenna in your new citizens band system. You have just purchased a superior transceiver. Don't diminish its performance by installing an inferior antenna.

Only a properly matched antenna system will allow maximum power transfer from the 50-ohm transmission line to the radiating element. Your Uniden dealer is qualified to assist you in the selection of the proper antenna to meet your application requirements.

For automobile installation, the whip antenna may be used with good effect. The most efficient and practical installation is a full quarter wave whip antenna mounted on the rear deck or fender top midway between the rear window and bumper.

A short "loaded" whip antenna is more convenient to install on your automobile, although the efficiency is less than a full quarter wave whip antenna.

For marine installation, consult your dealer for information regarding an adequate grounding system and prevention of electrolysis between fittings in the hull and water.

GROUND SYSTEM

Connect the red DC power cord from the transceiver to the positive, or (+), battery terminal or other convenient point and connect the black power lead to the chassis or vehicle frame, or (-) battery terminal.

SELCALL

SELCALL (Selective Calling) is a special Squelch System which quiets your receiver until it receives an Encoded signal from another set which matches the one installed in your set. This means your set will remain quiet and not receive idle chit chat or other signals until the station you want to hear calls.

SELCALL is not initially installed in your set (each one has to be individually programmed) but may be purchased as an option.

OPERATING PROCEDURE TO RECEIVE

- 1. Be sure that the power source, antenna and microphone are connected to the proper connectors before going to the next steps.
- 2. Turn the unit ON by rotating the OFF/VOLUME Control clockwise.
- 3. Set the CHANNEL SELECTOR switch to the desired channel.

- 4. Set the OFF/VOLUME Control to a comfortable listening level.
- 5. Listen to the background noise from the speaker. Turn the SQUELCH control slowly clockwise until the noise JUST disappears (no signal should be present). Leave the control at this setting. The SQUELCH is now properly adjusted. The receiver will remain quiet until a signal is actually received. Do not advance the control too far, or some of the weaker signals will not be heard.

OPERATING PROCEDURE TO TRANSMIT

- CAUTION -

The transceiver Voltage Standing Wave Ratio (V.S.W.R.) measurement must be performed prior to the use of the transmitter. A V.S.W.R. ratio in excess of 2:1 may damage the transmitter.

- Be sure the operator has read and understands D.O.C. Rules and Regulations prior to operating the transmitter.
- 2. Select the desired channel.
- If the channel is clear, depress the PRESS-TO-TALK switch on the microphone and speak in a normal voice.

PREVENTIVE MAINTENANCE

At six to twelve month intervals, the following system checks should be made:

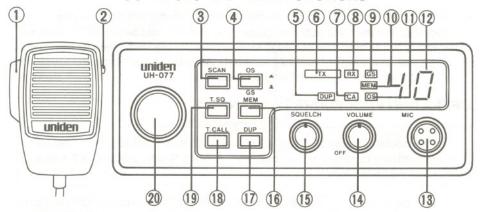
- 1. Check Standing Wave Ratio (SWR).
- 2. Inspect all electrical connections to ensure that they are tight.
- 3. Inspect antenna coaxial cable for wear or breaks on shielding.
- 4. Inspect all screws and other mounting hardware for tightness.

OPERATOR TROUBLESHOOTING

Should the unit malfunction or not perform properly, the operator should perform the procedures indicated below:

- 1. If the transceiver is completely inoperative.
 - * Check the power cord and fuse.
- 2. If trouble is experienced with receiving.
 - * Check OFF/VOLUME control setting.
 - * Be sure **SQUELCH** is adjusted properly. Is the radio over-squelched?
 - * Check to see that the radio is switched to an operational mode.
- 3. If trouble is experienced with transmitting.
 - * Check to see that the transmission line (coaxial cable) is securely connected to the ANTENNA CONNECTOR.
 - * Be sure that the antenna is fully extended for proper operation.
 - * Be sure that all transmission line (coaxial cable) connections are secure and free of corrosion.

CONTROLS AND THEIR FUNCTIONS



 PRESS-TO-TALK MICROPHONE: The receive and transmit are controlled by the PRESS-TO-TALK switch on the microphone. Press the switch on the microphone to activate the transmitter; release the switch to receive. When transmitting, hold the microphone two inches from the mouth and speak clearly in a normal voice. The microphone provided with your radio is detachable low impedance dynamic type.

2. MEM/SKIP SWITCH:

In the **NORMAL** mode: Press the **MEM/SKIP** switch to program or disable channels in the selected scan memory.

In the **GROUP SCAN** mode: When scanning, press the **MEM/SKIP** switch to **HOLD** the channel currently being scanned. Press again to resume scanning.

In the **OPEN SCAN** mode: When scanning, press the **MEM/SKIP** switch to **SKIP** over a busy channel you do not wish to listen to.

SCAN SWITCH: When this switch is pressed, the SUNDOWNER UH-077 will scan any channels programmed in the selected Scan mode.

NOTE: The radio will not Scan if the selected Scan memory has not been programmed.

OPEN SCAN/GROUP SCAN SELECT SWITCH: This switch is used to select the required Scan mode. When this switch is 'IN', the radio is able to scan in the OPEN SCAN mode.

Press this switch 'OUT' to scan in the GROUP SCAN mode.

- 5. **DUPLEX INDICATOR:** When the channel indicated by the **CHANNEL INDICATOR** and Duplex memory is programmed, this **LED** is turned on.
- 6. TX INDICATOR: This LED indicates red while transmitting.

7. TONE CALL INDICATOR:

In the **GROUP SCAN** mode & **NORMAL** mode: When a signal has been received on the **PRIORITY** channel this **LED** will be on.

When a **SELCALL** module is installed: While receiving **TONE SIGNAL**, this **LED** will be on.

- 8. RX INDICATOR: Lights during the receive mode whenever a station is being received, or whenever the SQUELCH control is adjusted fully counter clockwise.
- 9. GROUP SCAN INDICATOR: Lights when the GROUP SCAN mode is selected.

10. MEMORY INDICATOR:

In the normal mode (SCAN switch OUT): lights if the channel indicated by the CHANNEL INDICATOR and selected by the CHANNEL SELECTOR switch is programmed into the selected scan memory.

- 11. OPEN SCAN INDICATOR: Lights when the OPEN SCAN mode is selected.
- 12. CHANNEL INDICATOR: LED indicates the channel number in use.

During **NORMAL** Mode: Displays the channel selected by the **CHANNEL SELECTOR** Switch.

During **SCAN** Mode: Displays the channel currently being scanned. Channel number changes every 0.07 second.

13. FRONT MICROPHONE SOCKET

- 14. OFF/VOLUME CONTROL: Turn clockwise to apply power to the radio and to set the audio volume to the desired listening level. Turn fully counterclockwise to turn the radio OFF.
- 15. SQUELCH CONTROL: This SQUELCH Control is rotated to cut off or eliminates received background noise in the absence of an incoming signal. For maximum receive sensitivity, it is desired that the control be rotated only to this point where the receive background noise or ambient background noise is eliminated. Turn the control fully counterclockwise, then slowly rotate clockwise until the receive noise disappears. Any signal to be heard must now be slightly stronger than the average received noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. Only strong signals will be heard at the maximum clockwise setting.

16. MEMORY SWITCH:

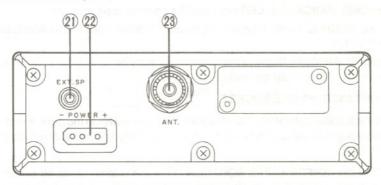
In the **NORMAL** mode: Press the **MEM** switch to program or disable channels in the selected scan memory.

In the **GROUP SCAN** mode: When scanning, press the **MEM** switch to **HOLD** the channel currently being scanned. Press again to resume scanning.

In the **OPEN SCAN** mode: When scanning, press the **MEM** switch to **SKIP** over a busy channel you do not wish to listen to.

17. DUPLEX SWITCH: To program semi-duplex operation for channel 1 through channel 8. Select the channel you would like to use as repeater channel (check your local repeater station frequency first) and push the DUP switch and then DUP indicator will turn on. Select next repeater channel and push the DUP switch again and so on. To put the channel back to normal simplex operation, just select the DUPLEX programmed channel by channel selector and push the switch so that the DUP indicator turns off to indicate that channel is no longer repeater frequency off-set channel. CH 1 through CH 8 are programmable for the repeater operation.

- 18. TONE CALL SWITCH: This switch is reserved for optional SELCALL operation. Push the T. CALL switch, (when this action is taken, TX indicator will flash), then, TONE SIGNAL will be generated and it opens the Squelch of the other units which have the same tone squelch function.
- 19. TONE SQUELCH SWITCH: This switch is reserved for optional SELCALL operation. Push the T.SQ switch while receiving the TONE SIGNAL. Then, the Circuit of the SQUELCH is automatically opened.
- CHANNEL SELECTOR SWITCH: This switch selects the desired channel for transmission and reception.



- 21. EXTERNAL SPEAKER: The External Speaker Jack is used for remote receiver monitoring. The external speaker should have 8-ohm impedance and be rated to handle at least 4.0 watts. When the external speaker is plugged in, the internal speaker is automatically disconnected.
- POWER: This jack permits connection of the D.C. power to the transceiver. A power cord is supplied with the radio.
- 23. ANTENNA CONNECTOR: This female connector permits connection of the transmission line cable male connector (M-Type) to the transceiver.

Memory Backup

Channels maintained in the SUNDOWNER UH-077 memory are protected from loss by a built-in capacitor which protects the memory for up to 12 hours when you disconnect the DC Power Cable.

SERVICING YOUR TRANSCEIVER

The technical information, diagrams and charts will be supplied upon request.

It is the user's responsibility to see that this radio is operating at all times in accordance with the D.O.C. Citizens Radio Service regulations.

We highly recommend that you consult a qualified radiotelephone technician for the servicing and alignment of this UHF CB radio product.

Please refer to the WARNING information contained in the 2nd page of this Owner's Manual.

(NOTE: When ordering parts, it is essential to specify the correct model number and serial number of the unit.)

OPERATING INSTRUCTIONS

NORMAL OPERATION

RECEIVE OPERATING PROCEDURE

- 1. Connect the 13.8 Volt power lead, microphone and antenna.
- 2. Select the NORMAL mode by selecting the SCAN switch (3) to the 'OUT' position.
- 3. Rotate the SQUELCH control (15) fully counterclockwise.
- Switch the radio on by turning the OFF/VOLUME control (14) clockwise and adjust for a comfortable volume level, and adjust for a comfortable squelch level.
- 5. Rotate the **CHANNEL SELECTOR** switch (20) to select the required channel.

TRANSMITTING

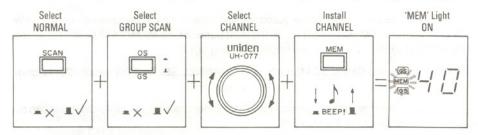
To transmit, depress the **PRESS-TO-TALK** switch (1) on the microphone. Hold the microphone 5-10 cm from your mouth and slightly to one side so that your voice does not project directly into the microphone (this provides best results). Speak at a normal level. Never raise your voice or shout into the microphone. Whenever the **PTT** switch is pressed, the **TX** indicator (6) will light.

PROGRAMMING SCAN CHANNELS

When the radio is initially powered up, there will not be any channels programmed into the Group Scan Memory.

To program scan channels into the Group Scan memory, use the following procedure:

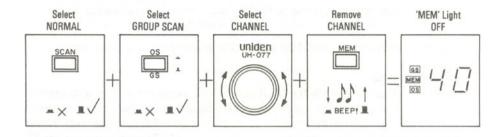
- 1. Select the NORMAL mode by selecting the SCAN switch (3) to the 'OUT' position.
- Select the GROUP SCAN Mode by selecting the OS/GS Select switch (4) to the 'OUT' position. The GS indicator (9) should be lit.
- 3. Rotate the **CHANNEL SELECTOR** switch (20) until the channel you wish to scan is displayed. Note that the **MEM** indicator (10) should **NOT** be lit, indicating that this channel is not currently programmed into the **GROUP SCAN** memory.
- 4. Press and hold the MEM switch (16) for about 1 second until a BEEP is heard. The MEM indicator (10) should now be lit indicating that the channel is now programmed into the memory.
- 5. Continue steps 3 and 4 to program all the channels you wish to scan.



REMOVING GROUP SCAN CHANNELS

To **DELETE** a programmed channel from the Group Scan Memory.

- Rotate the CHANNEL SELECTOR switch (20) until the channel you wish to remove is displayed. Note that the MEM indicator (10) should be lit, indicating that this channel is currently programmed in the memory.
- 2. Press and hold the **MEM** switch (16) for about 2 seconds until a **BEEP** is heard twice. The **MEM** indicator (10) should now be extinguished.



OPEN SCANNING

To commence open scanning, select the **OPEN SCAN** mode by selecting the **OS/GS** Select switch (4) to the **IN** position. Then select the **SCAN** switch (3) to the **IN** position.

The SUNDOWNER UH-077 will commence scanning the programmed channels, and will indicate each channel on the **CHANNEL** indicator (12) as it is scanned.

When a busy channel is found, the radio will 'lock' onto it, and will remain there for as long as the signal is present, and for 3 seconds after the transmission ceases. This allows the SUNDOWNER UH-077 to hold the channel during short breaks in the conversation. Once the channel has remained clear for 3 seconds, the radio will resume scanning.

If you don't wish to listen to a busy channel, you can **SKIP** over it by pressing either the **MEM** switch (16) on the radio, or the **MEM/SKIP** switch (2) on the microphone. The receiver will immediately resume scanning.

To manually hold a channel indefinitely (temporarily inhibiting the scan function), momentarily press the **PTT** switch (1), and the radio will cease scanning and will hold on the channel which was being scanned. The **HELD** channel can now be used for normal transmission and reception.

To **RESUME** scanning — whether automatically 'locked' on a busy channel, or manually **HELD** — press the **MEM** switch (16) on the front panel, or the **MEM/SKIP** switch (2) on the microphone, once. The radio will begin scanning again.

- NOTE: 1. During OPEN SCAN mode, the CHANNEL SELECTOR switch (20) is ignored.
 - 2. The scan rate in this mode is 70 msec per channel, i.e. all 40 channels can be scanned in 2.8 seconds.

GROUP SCANNING

NOTE:

- If the GROUP SCAN memory has not been programmed when the GROUP SCAN Mode is selected by selecting the OS/GS Select switch (4) to the OUT position and the SCAN switch (3) is selected, the SUNDOWNER UH-077 will ignore the SCAN switch (3) and will behave as if it had not been pressed.
- 2. The PRIORITY channel number can easily be read when required by:
 - (a) Temporarily releasing the SCAN switch.
 - (b) Pressing the PTT switch. The radio will jump to the PRIORITY channel for 3 seconds before resuming the SCAN function.

To commence **GROUP SCANNING**, select the **GROUP SCAN** Mode by selecting the **OS/GS** Select switch (4) to the **OUT** position and select the **SCAN** mode by selecting the **SCAN** switch (3) to the **IN** position.

The SUNDOWNER UH-077 will now scan the programmed channels, displaying each channel number and the **PRIORITY** channel number. Because, before it scans each channel, it quickly "checks" the **PRIORITY** channel (set by the **CHANNEL SELECTOR** switch).

RECEIVING A SIGNAL ON A GROUP SCAN CHANNEL

If a signal is received on a programmed scan channel, the radio will 'lock' onto that channel provided there is no signal on the PRIORITY channel.

When the receiver is 'locked' onto the scan channel, and at the same time, the **LED** channel display will flash from the scan channel to the **PRIORITY** channel. This is because the receiver is still 'listening' for signals on the **PRIORITY** channel.

When the scan channel becomes quiet again, the radio will continue to hold the channel for a further 3 seconds in order to allow for a natural pause in the conversation before resuming the Group Scanning mode.

If there is a transmission on the **PRIORITY** channel while you are listening to a scan channel, the receiver will immediately transfer to the **PRIORITY** channel and the **PRIORITY** channel number will be displayed.

To manually **HOLD** a scan channel indefinitely, momentarily press the **MEM** switch. The radio will cease scanning and will hold the channel, but will **continue to DUAL WATCH the PRIORITY channel**.

To **RESUME** scanning, momentarily press the **MEM** switch on the front panel or the **MEM/ SKIP** switch on the microphone, again. The receiver will resume scanning.

To transmit on a Group Scan channel, rotate the channel switch to the required channel, making it the **PRIORITY** channel. Return the channel selector to the correct **PRIORITY** channel when you have completed your conversation.

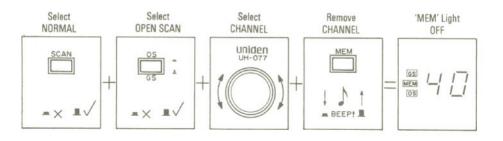
REMOVING OPEN SCAN CHANNELS

When the radio is initially powered up from the box, all 40 channels will be programmed into the **OPEN SCAN MEMORY**.

If you do not wish to scan any particular channels (e.g. if one or more channels are continually busy and always causing the scanning function to pause), you may remove these channels from the scan group using the following sequence.

- 1. Select the NORMAL mode by selecting the SCAN switch (3) to the OUT position.
- 2. Select the OPEN SCAN mode by selecting the OS/GS Select switch (4) to the IN position. The OS indicator (11) should be lit. The GS indicator should NOT be lit.
- 3. Rotate the CHANNEL SELECTOR switch (20) until the channel you wish to REMOVE is displayed on the LED CHANNEL indicator (12).
 - Note that **MEM** indicator is lit, showing you that this channel is currently included in the scan group.
- 4. PRESS and HOLD the MEM switch (16) for about 2 seconds until a BEEP is heard twice.

NOTE: that the MEM indicator is now extinguished.

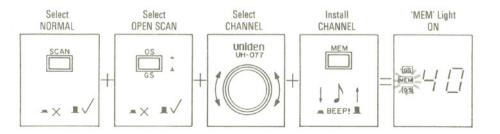


The selected channel has now been removed from the scan group and will not be included when scanning has commenced and the **MEM** indicator will not light on that channel.

Continue steps 3 and 4 to remove any other channels you do not wish to scan.

REINSTALLING CHANNELS INTO THE SCAN GROUP

To reinstall previously deleted channels into the scan group, simply repeat steps 3 and 4. However, this time note that there will be a **BEEP** heard when the **MEM** switch is pressed, and the **MEM** indicator will **LIGHT**, showing the selected channel is now included in the scan group.



When you have finished, rotate the channel switch and notice that the \mathbf{MEM} light is indicating which channels are programmed and which have been removed.

SPECIFICATIONS GENERAL

Channels

Frequency Range : 476.425 MHz to

477.400 MHz
* REPEATER USE (CH-1 to CH-8, TX only):

40

477.175 MHz to 477.350 MHz

Crystal Oscillator Microphone

Speaker

: 2 : 600 ohm, Dynamic Type : 8 ohm, 3W

Antenna Connector Jacks & Connectors : M-Type : Mic 4P Metal EXT SP 3.5 \(\phi \)

DC Power 3P Type
Controls : PRESS-TO-TALK Switch

MEM/SKIP Switch SCAN Switch OPEN SCAN/GROUP SCAN SELECT Switch OFF/VOLUME Control SQUELCH Control MEMORY Switch

DUPLEX Switch

TONE CALL Switch
TONE SQUELCH Switch
CHANNEL SELECTOR

Switch

Indicators : DUPLEX Indicator

TX Indicator RX Indicator

TONE CALL Indicator GROUP SCAN Indicator MEMORY Indicator OPEN SCAN Indicator

CHANNEL Indicator

Cabinet Size : W: 154.5 mm

H: 52.5mm D: 188mm 1.2 kg

Weight : 1.2 kg
Accessories : DC Power Cable with

Built-in fuse, Microphone, Microphone Hanger Mounting Bracket Screw (2), Washer (2) For Microphone Hanger

Screw (2), Washer (2) For

Mounting Bracket

MEASUREMENT CONDITIONS

Power Source : 13.8V (DC)
Antenna Impedance : 50 ohm
Test Temperature : 25°C
Modulation Frequency : 1 kHz (RX/TX)

Mean Signal Input Level : 1000 μ V Reference Audio Output

Power : 500mW

Reference Modulation

Deviation : ±3 kHz Deviation Audio Output Load : 8 ohms resistive

TRANSMITTER SECTION

Frequency Tolerance at

25°C

(5 minutes after switch on) : ±0.5 kHz

Carrier Power : 5W Spurious Emission

| In Band | : 5μW | Out Band | : 1μW | Current Drain | : 1300mA

Modulation Frequency Response: (1 kHz, 0dB reference, at 600 Hz

deviation)

Lower at 500 Hz : —6 dB Upper at 2.5 kHz : +5 dB Microphone Sensitivity for 3 kHz Deviation : 1mV

for 3 kHz Deviation Maximum Deviation

at 1 kHz : ±4.75 kHz at 6 kHz : ±1.5 kHz MAX

RECEIVER SECTION

Sensitivity for 12 dB SI-

NAD : $0.25\mu\text{V}$ Overall Audio Fidelity :

(1 kHz, 0 dB reference) Lower at 500 Hz : +3 dB Upper at 2.5 kHz : -8 dB

Adjacent Channel
Selectivity (±25 kHz) ; 65 dB
Maximum Audio Output

Power : 3W Audio Output Power at

10% THD : 2W Hum & Noise Ratio at

Input 1mV : 40 dB Squelch Sensitivity at

Threshold : $0.1 \mu V$ Squelch Sensitivity at

Tight : 1 µV Image Rejection Ratio : 60 dB IF Rejection Ratio : 70 dB Oscillator Dropout

Voltage : 9V Current Drain at No Sig-

nal : 300mA

Current Drain at Maximum Output

: 600mA

MEMO

WARRANTY

WARRANTOR: UNIDEN Australia Pty. Ltd. ("UNIDEN").

ELEMENTS OF WARRANTY: UNIDEN warrants to the original retail owner for the duration of this warranty, UNIDEN CB Product (hereinafter referred to as the Product) to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original user shall terminate and be of no further effect One (1) Year after the date of original retail sale. The warranty is invalid if the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by UNIDEN, (C) improperly installed, (D) repaired by someone other than an authorized service center for a defect or malfunction covered by this warranty, (E) used in any conjunction with equipment or parts or as part of any system not manufactured by UNIDEN (F) installed, programmed or serviced by anyone other than an authorized UNIDEN service center.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will repair the defect and return it to you without charge for parts, service, or any other cost incurred by warrantor or its representatives in connection with the performance of this warranty. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: In the event that the Product does not conform to this warranty, the Product should be shipped or delivered, freight prepaid, to warrantor at 345 Princes Highway, Rockdale, N.S.W. 2216 with evidence of original purchase.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



Australia Pty. Ltd.

HEAD OFFICE:

345 Princes Highway, Rockdale, N.S.W. 2216 Phone: 599 3355 Fax: (02) 599 7657

BRISBANE

3/12 Randall Street, Slacks Creek, Old. 4127 Phone (07) 290-1188 Fax (07) 808 4251

MELBOURNE & TASMANIA

446-448 Bell Street, East Preston, VIC. 3072 Phone (03) 484-0373 Fax (03) 484 6057

PERTH

23 Geddes Street, Balcatta, W.A. 6021 Phone (09) 344-3937 Fax (09) 349 8165

ADELAIDE

72-74 Halifax Street, Adelaide S.A. 5000 Phone (08) 223-4235 Fax (08) 223 1471